

IN THE SPECIFICATION:

Please amend the portions of the Specification identified below to read as indicated herein. A version of the amended portions of the Specification with markings to show changes made is included at the end of this document.

u Page 22, line 31, delete entire line and add in its place "Thin film transistor and bus line layer (detailed structure not shown but well known in the art)."

IN THE CLAIMS:

✓ Please cancel claim 21.

Please amend the claims as follows:

a2 1. A method of preparing a multi-domain, dry deposited liquid-crystal alignment layer, by at least one method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field;

2, 3, wherein said dry deposited liquid-crystal alignment layer is exposed to a particle beam; and

wherein said particle beam is directed at said dry deposited liquid-crystal alignment layer at an adjustable angle with respect to said dry deposited liquid-crystal alignment layer.

a3 3. The method of claim 2, wherein said dry deposit layer material is selected from the group consisting of: hydrogenated diamond-like carbon, amorphous hydrogenated silicon, silicon carbide (SiC), silicon dioxide (SiO₂), glass, silicon nitride (Si₃N₄),

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Q3 alumina (Al₂O₃), cerium(IV) oxide (CeO₂), tin oxide (SnO₂), zinc titanate (ZnTiO₂) and a combination thereof.

9. A multi-domain, wide viewing angle liquid-crystal display, comprising:
- a bottom substrate having a first surface;
 - a first transparent conductive layer disposed over said first surface of said bottom substrate;
 - a top substrate having a second surface;
 - a color filter layer disposed over said second surface of said top substrate;
 - a second transparent conductive layer disposed over said color filter;
 - a first dry deposited liquid-crystal alignment layer over said first transparent conductive layer;
 - a second dry deposited liquid-crystal alignment layer over said second transparent conductive layer; said second dry deposited liquid-crystal alignment layer being spaced adjacent to and facing said first dry deposited liquid-crystal alignment layer;
 - a plurality of uniformly sized transparent or non-transparent spacers distributed within said space; and
 - a liquid-crystal material disposed in the space therebetween;

wherein each of said first alignment layer and said second alignment layer is divided into a plurality of pixels each having a boundary and at least two domains; wherein each of said multi-domain, dry deposited liquid-crystal alignment layers is obtained by a method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field methods,

wherein said dry deposited liquid-crystal alignment layer is exposed to a particle beam; and

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wherein said particle beam is directed at said dry deposited liquid-crystal alignment layer at an adjustable angle with respect to said dry deposited liquid-crystal alignment layer.

30. An improved method of preparing an in-plane switching mode liquid-crystal display of the type having the steps of forming a first polyamide alignment layer and a second polyamide alignment layer, wherein each of the first and second layers is rubbed with a mechanical roll wrapped in a velvet cloth, wherein the improvement comprises the steps of:

forming a first dry deposited alignment layer;
forming a second dry deposited alignment layer;
spacing said first dry deposited alignment layer and said second dry deposited alignment layer adjacent to and facing each other; and
filling a liquid-crystal material in the space therebetween;
wherein each of said dry deposited liquid-crystal alignment layers is obtained by a method selected from the group consisting of: mechanical mask, photo-resist, UV treatment, and ridge and fringe field;

wherein said dry deposited liquid-crystal alignment layer is exposed to a particle beam; and

wherein said particle beam is directed at said dry deposited liquid-crystal alignment layer at an adjustable angle with respect to said dry deposited liquid-crystal alignment layer.

31. A wide viewing angle in-plane switching mode liquid-crystal display, comprising:

a bottom polarizer;
a bottom substrate;
a top polarizer;

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a top substrate;
a color filter layer disposed over a surface of said top substrate;
a plurality of common electrodes disposed in the bottom substrate plane and a plurality of pixel electrodes disposed in a staggering relationship therewith to form a comb-like structure for producing an electric field parallel to plane of said bottom substrate so that when operated, the molecules of said liquid-crystal material are switched to rotate by said vertical electric field in a direction parallel to the substrate surface;
a first dry deposited liquid-crystal alignment layer over said bottom substrate and said comb-like electrodes;
a second dry deposited liquid-crystal alignment layer over said color filter layer; said second dry deposited liquid-crystal alignment layer being spaced adjacent to and facing said first dry deposited liquid-crystal alignment layer;
a plurality of uniformly sized transparent or non-transparent spacers distributed within said space; and
a liquid-crystal material disposed in the space therebetween;
wherein said dry deposited liquid-crystal alignment layer is exposed to a particle beam; and
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wherein said particle beam is directed at said dry deposited liquid-crystal alignment layer at an adjustable angle with respect to said dry deposited liquid-crystal alignment layer.

Please add the following new claims:

34. The liquid-crystal display of claim 1, wherein said particle beam is directed at said dry deposited liquid-crystal alignment layer at an angle from about 10 to about 20 degree angle with the plane of the electrodes.

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